

STUDIES IN INDIAN ETHNOBOTANY—LESS KNOWN USES OF FIFTY COMMON PLANTS FROM THE TRIBAL AREAS OF MADHYA PRADESH

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ABSTRACT

A study of plants used by the aboriginal tribes in Madhya Pradesh revealed that several uses to which plants are put by these people are not known to outside community. The paper reports such less known uses for fifty plants.

The plants are grouped in three categories—plants used for food, medicine and miscellaneous purposes. The local names of plants and the locality or source of information is given.

The botany of the State of Madhya Pradesh is still imperfectly known. There is no recent comprehensive account of the economic plants or a Flora of the State. A few short enumerations or descriptive lists of forest species have been published. Also some floristic accounts have been written for the university towns and their neighbourhood.

It is of interest to record that Madhya Pradesh has the largest concentration of tribal people in India. About fifty-four percent of the total tribal population of India resides here. Gonds alone are over three millions. The aboriginals form an average of twenty to twenty-five per cent of population of Madhya Pradesh, though in some parts such as the districts of Mandla and Bastar they form about seventy percent of the population.

The tribals use wild plants in a variety of ways, and not infrequently in raw state. The chief uses of plants for the tribals are for food, native medicine and a variety of domestic articles. They are also used for fuel, dye, tannin, fibre, timber, oils, agricultural or hunting tools, weapons, and for witchcraft and magic. Some are used in worship and other mythology.

Due to constant association with the forest environment the tribals have evolved a curious knowledge of plants and their utility for them. Many of the uses for which plant products are employed by the tribals are not known outside their restricted community.

Field observations in the Mandla and Bastar districts of Madhya Pradesh have brought to light several such uses of plants. It is the purpose of the present paper to record this information for wider circulation. An examination of this information by the plant chemists or the forest utilisation officers may indicate that some of the reported uses are not significant enough to be of commercial value i.e. for purposes of exploitation or are not genuine. The information is based on first hand notes gathered from the tribal people themselves or from the local guides accompanying in field work. If some or even few of these less known uses come out to be of potential wider usage it may be very much worthwhile,

Four field trips were undertaken to different parts of Madhya Pradesh, including the region of Abujhmad in Bastar. This is an almost unexplored region and no botanical account even is available. The only reference to some species of forest or agricultural significance in this area is found in ethnographic accounts of the tribals of Bastar by Grigson (1938) and Elwin (1943, 1947). Short accounts of the plants used by the tribals of Madhya Pradesh in their medicine and as food have been recently given by the present author (Jain, 1963a, 1963b). The present account includes several additional uses recorded from the region. For comparison a brief remark has been given about the chief earlier known uses of the plant. The old literature on medicinal plants of India, in English as well as Hindi and Sanskrit and regional languages is enormous and a comparison with all of them is near impossible. Effort has been made to compare the information with important review and reference works, particularly the recent ones, such as Agharkar (1953), Burkill (1935), Chopra et al. (1956), Dastur (1951), Watt (1889-96) and With India (1948-1962).

In the following account the plants are grouped in three categories according to their utility. In the first category are included those plants which are used by the natives as food. Their use as timber or medicine or fibre etc. is recorded in literature, but they are not known as edible plants. The part of the plant used for eating purposes is mentioned as well as the source or locality of information.

In the second category, similarly, are the plants used in medicine. Their use in medicine in general or in the manner now reported does not seem to have been recorded. In the third category are the plants employed for other miscellaneous uses.

Within the three categories the plant names are arranged alphabetically. The natural order and the local names are given. Then are described the newly reported uses. In the last para, in parentheses, a brief remark is given about the chief known usage of the plant. Plants which would require mention in more than one category have been described only under that one category where their

chief usage will place them. Notes on their other uses are given there only.

The local names of plants recorded here are mostly different from the prevalent local names and are not found in literature; this further indicates that these areas have not so far been well explored.

I PLANTS USED AS FOOD

Bauhinia purpurea Linn. (Caesalpiniaceae)

'Mari: Dhondhar, Kancan-kacnar; Gond: Kodel'.

Young leaves are eaten as vegetable. Locality: Yerandval. (Flowers eaten).

Celastrus paniculata Willd. (Celastraceae)

'Dorli: Manotige; Mari: Vadangul; Halbi: Pemg; Telegu: Papdi'.

Halbas eat flowers as vegetable, loc. Orcha. Marias eat young fruits as vegetable, loc. Kohkameta.

(Seed oil is medicinal).

Combretum nanum Buch.-Ham. (Combretaceae)

'Halbi: Dudhel; Mari: Vatmangi, Bhuidaudi'.

Seeds are eaten. Loc. Dhanora.

Cordia dichotoma Forst. f. (Boraginaceae)

'Halbi: Bohar'.

Leaves are eaten as vegetable. Loc. Chhotedongar, Pallighat.

(Fruit edible and medicinal, bark for tannin).

Gardenia gummiifera Linn. f. (Rubiaceae)

'Halbi: Kullu, Kurlu; Mari: Vidgi, Dikamalli; Telegu: Sintamettu.

Ripe fruits and seeds eaten. Loc. Dhanora.

(Resin, wood).

Grewia tilaefolia Vahl (Tiliaceae)

'Halbi: Dhaman; Mari: Kehla'.

Young leaves are eaten. Loc. Aturbeda.

(Wood, fruit).

Hymenodictyon excelsum Wall. (Rubiaceae)

'Gondi: Mac, Minaboder; Hindi: Bhommal'.

Leaves eaten as vegetable. Loc. Along Mari river banks beyond Geedam on Bijapur road. In Oriya areas the root is pounded and the thread from its fibre is used for making borders of Saris (dhotis).

(Timber).

Phoenix humilis Royle var. **pedunculata** Becc. (Palmae)

'Halbi: Chind, Indi'.

The stem base is eaten. Loc. Orcha.

(Fruit eaten).

Polygonum plebejum R. Br. (Polygonaceae)

'Halbi: Chatibhaji'.

The whole plant is used as vegetable. Women and children are frequently seen collecting it in harvested agricultural fields. Loc. Chhotedongar.

(Root medicinal).

Sacciolepis interrupta (Willd.) Stapf (Gramineae)
'Halbi: Hathilid'.

Seeds are eaten as grain. Loc. Bastar.

Smithia conferta Sm. (Papilionaceae)

'Halbi: Titalboti, Citalboti'.

Gonds eat it as vegetable, deer eat it. Loc. Bastar.

(Medicinal).

Xylia xylocarpa (Roxb.) Taub. (Mimosaceae)

'Mari: Kadai; Halbi: Tangan'.

Seeds are eaten. Loc. Aturbeda.

(Timber).

II MEDICINAL PLANTS

Acampe praemorsa Blatter & McCann, syn. *A. wightiana* Lindl. (Orchidaceae)

'Chind; Telegu: Vajnik'.

A paste of pounded leaves is applied on broken bones; the leaves are also tied like splinters. Loc. Orcha.

(Tonic and in rheumatism).

Alangium salvifolium (Linn. f.) Wang. (Cornaceae)

'Halbi: Baranga, Amkol'.

Fruits are eaten as preventive and also for curing eye diseases. Loc. Yerandval. The seed oil works as growth promoter and fertilizer. Bark is used for cordage. Loc. Chhotedongar.

(Timber, root bark anthelmintic and purgative).

Andrographis paniculata Nees (Acanthaceae)

'Gondi: Bhui-limb'.

The plant is pounded in mustard oil and applied on itches and snake-bite wounds. Loc. Dantewara. (Febrifuge).

Blepharispermum subsessile DC. (Compositae)

'Gondi: Rasnajadi, Batvali'.

Root given as tonic. Loc. Orcha, Ader.

Buchanania lanzan Spr. (Anacardiaceae)

'Halbi: Car; Gondi: Reka'.

Leaves are pounded and applied on wounds. Loc. Kohkameta.

(Fruit edible, timber).

Capsicum frutescens (Solanaceae)

'Mari: Kogamiriya'.

Leaves crushed on palm and inhaled for curing headache. Loc. Orcha.

(No use reported for leaf).

Casearia elliptica Willd. syn. *C. tomentosa* Roxb. (Samydaceae)

'Halbi: Svarnmul'.

Root bark as tonic in anaemic conditions. Loc. Bastar.

(Tannin).

Cassia tora Linn. (Caesalpiniaceae)

'Halbi: Carota'.

Leaves pounded and applied on cuts and wounds like tincture-iodine. Loc. Bastar.

(Seeds medicinal and used as coffee).

Citrus aurantifolia (Christ.) Sw. (Rutaceae)

'Halbi: Nimbu'.

One lemon's juice added to one pound unboiled milk (cow) and given to stop loose motions. Loc. Chhotedongar.

(For culinary purposes).

Elephantopus scaber Linn. (Compositae)

'Halbi: Punjki'.

Root pasted in mother's milk and given to babies in fever. Loc. Bastar.

(Emollient, to arrest vomiting).

Flacourtia indica (Burm. f.) Merr. (Bixaceae)

'Halbi: Kevti, Kakai'.

Bark is applied in eczema. Loc. Bastar.

(Tannin, timber, fruit).

Hibiscus lampas Cav. (Malvaceae)

'Mari: Gupat; Halbi: Bondki; Telegu: Paya-potku'.

Seeds given to children as anthelmintic. Loc. Bailadilla.

(Root and fruit in gonorrhoea).

Ipomoea aquatica Forsk. (Convolvulaceae)

'Mari: Pandratonda, Tondajaba, Pannejabe; Halbi: Mendka'.

Flowers are crushed and the filtrate is put in eye. Loc. Orcha.

(Vegetable).

Leucas aspera Spr. (Labiatae)

'Halbi: Gubibuta; Mari: Tumakusir; Telegu: Gandudumi'.

The juice of roots is put in nostril in 'Adhashishi' (half-head) headache. Loc. Chhotedongar.

Madhuca indica Gmel. (Sapotaceae)

'Mari: Idukmar; Halbi: Moda, Idum, Mahua'.

The seed cake is used in snake-bite. Few drops of the decoction are put in nostrils. The victim vomits away. The smoke of the cake is believed to keep snakes away. Loc. Narayanpur.

(Liquor, sweet, medicine).

Merremia umbellata (Linn.) Hall. f. (Convolvulaceae)

'Gondi: Pandritonde'.

Flowers are given in eye diseases. Loc. Orcha.

(Medicinal).

Nicotiana tabacum Linn. (Solanaceae)

'Mari: Poga'.

A mixture of lime and tobacco is put in wounds. (Narcotic).

Orthosiphon rubicundus Benth. (Labiatae)

'Halbi: Bankikir'.

Powdered dry roots are applied on wounds of cattle. Loc. Orcha.

Scoparia dulcis Linn. (Scrophulariaceae)

'Halbi: Mithi-patti, Ghodatulsi'.

A cooling drink is prepared from the seeds. Leaves are pounded and made into small pills of the size of rice grain, given three each day as tonic. Loc. Dongaghat, Jagdalpur.

Shorea robusta Gaertn. f. (Dipterocarpaceae)

'Mari: Harangi; Gondi: Sargi'.

Fruits are pounded into a paste and given in loose purges. Twigs used as toothstick. Loc. Chhotedongar.

(Timber, resin).

Solanum surattense Burm. f. (Solanaceae)

'Gondi: Apa; Mari: Remgahapa'.

Fruits are pounded and the juice is put in ear-ache. Loc. Orcha. Seeds boiled in water, decanted, then eaten with salt. Loc. Konge.

(All parts medicinal).

Tectona grandis Linn. f. (Verbenaceae)

'Halbi: Sagvan'.

The oil got from distillation of wood-chips is excellent for eczema. Loc. Narayanpur.

(Timber, medicine).

Vitex leucoxylon Linn. f. (Verbenaceae)

'Mari: Bereundemaran, Undemaran, Jamela'.

Anaemic patients are given bath in decoction of leaves. Loc. Jagdalpur.

(In fever, etc.).

III. PLANTS FOR MISCELLANEOUS USES

Abutilon indicum (Linn.) Sweet (Malvaceae)

'Halbi: Jhapipak'.

Fruits are worn as ear-pendants for ornament. Loc. Jagdalpur. (Medicinal).

Acacia pennata Willd. (Mimosaceae)

'Gondi: Iktonda'.

Bark is used as soap. Loc. Darbha.

(Tannin).

Achyranthes aspera Linn. (Amaranthaceae)

'Circita'.

Placing some roots of the plant in the hairdo of expectant mothers temporarily facilitates child-birth. Roots are put in mouth to give warmth and protection from cold. Loc. Jagdalpur.

(Diuretic).

Adina cordifolia (Roxb.) Hook. f. ex Brandis (Rubiaceae)

'Gondi: Hardimundi'.

Chips of bark are added to Salphi wine (from *Caryota urens*) to increase the rate of fermentation and to increase its intoxicating action. Loc. Aturbada.

(Timber, bark febrifuge).

Bauhinia vahli Wight & Arnott (Caesalpiniaceae)

'Mari: Paur, Paurtoda, Koya; Halbi: Siali, Siadi'.

Leaf used for wrapping 'bidi'. Loc. Ader.

(Fibre, edible seeds).

- Casuaria graveolens** Dalz. (Samydaceae)
 'Halbi: Kirci'.
 Fruits are used as beads. Loc. Dantevara.
 (Tannin, fish poison, etc.)
- Desmodium latifolium** DC. (Papilionaceae)
 'Halbi: Latakni'.
 Broomsticks are made from dry branched stems.
 Loc. Narayanpur.
 (Green manure, paper making).
- Desmodium pulchellum** Benth. (Papilionaceae)
 'Mari: Nadak; Halbi: Dhekna'.
 Stems used for broomsticks. Loc. Keskal Ghat.
 (Fodder).
- Diospyros melanoxylon** Roxb. (Ebenaceae)
 'Halbi: Tendu'.
 Gonds worship the tree in their festivals, it is placed in agricultural fields as auspicious omen all over Madh area. Grigson (*loc. cit.*) also records this. (Timber, bidi leaf, tannin).
- Hemidesmus indicus** (Linn.) Schult. (Asclepiadaceae)
 'Halbi: Dandarlaha'.
 Small pieces of root strung in a thread and put in neck as garland are supposed to cure fever.
 Loc. Jagdalpur.
- Jatropha gossypifolia** Linn. (Euphorbiaceae)
 'Mari: Kosnironda; Halbi: Ranijhada'.
 Dry seeds are pierced in a sharp bamboo stick; this burns like a candle. Stems used as tooth-stick are supposed to cure toothache. Loc. Orcha.
 (Medicinal).
- Milletia auriculata** Baker (Papilionaceae)
 'Gondi: Nasmata; Hindi: Agya'.
 Bed bugs are killed by the roots of the plant.
 Loc. Geedam.
 (Fish poison).
- Piliostigma malabarica** (Roxb.) Benth. syn. *Bauhinia malabaricum* Roxb. (Caesalpiniaceae)
 'Mari: Dhondermara; Halbi: Dhondera, Purol; Gondi: Sehedra'.
 Bark chips are added to Salphi wine to increase its intoxicating action. Loc. Ader.
 (Wood, tannin).
- Semecarpus anacardium** Linn. f. (Anacardiaceae)
 'Mari: Kohka; Halbi: Bhelva'.
 The seed oil is used for tattooing on body. A

mixture of this oil, coal and dung is used. The oil pierces the skin, the coal gives the colour and the goat dung heals the wounds caused by oil of Kohka. Loc. Bhairamgarh.
 (Medicinal).

Xanthium strumarium Linn. (Compositae)
 'Mari: Urcing; Halbi: Kutva, Gukhru; Gondi: Horgoba.

It is believed that putting on the prickly fruit in the ears as ear-rings relieves headache. Loc. Jagdalpur.
 (Medicinal).

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